

SPECIFICATION AMENDMENTS

Page 8, lines 10-12, please amend as follows:

Figs. 3A-3H are illustrations showing an exemplary embodiment of a writing method according to the invention by application of a temporally controlled external magnetic field; ~~and~~

Page 8, lines 14-18, please amend as follows:

Fig. 4 is a graph showing the conversion of the method graphically illustrated in Figs. 3A-3H into a pulse timing diagram which illustrates the mutually temporally offset current pulses through the word line and the bit line in each case when writing a logic "1" and a logic "0"[[.]]; and

Page 8, between lines 18-20, please insert:

--Figs. 5A-5H are illustrations showing an exemplary embodiment of a writing method for writing a logic "0" according to the invention by application of a temporally controlled external magnetic field.--.

Page 13, between lines 23-25, please insert:

--In the graphical representations of Fig. 5A to Fig. 5H, which illustrate the temporal sequence of the rotation of the magnetization when writing a logic "0", for simplification the asteroid is omitted and only the easy axis is indicated by a dashed straight line. As in Figs. 3A-3H, the magnetization of the memory cell MTJ is represented by a bold black arrow and the magnetic field which is composed of the magnetic field components  $H_y$  and  $H_x$  and is induced by the word line current  $I_{WL}$  and the bit line current  $I_{BL}$  is represented by a doubly dashed arrow. Fig. 5A illustrates the initial situation. In Figs. 5B and 5C, a magnetic field  $H_y$  is first present only in the y-direction, in a manner induced by the currents  $I_{WL}$  and  $I_{BL}$ , which magnetic field first rotates the magnetization of the MRAM memory cell MTJ through an angle of between  $180^\circ$  and  $90^\circ$  (Fig. 5C). Then, if the two currents  $I_{WL}$  and  $I_{BL}$  flow, the magnetic field is generated with components  $H_x$  and  $H_y$  of approximately the same magnitude in the x-direction and y-direction, as a result of which the magnetization direction (bold arrow) rotates further and assumes an angle in the range between  $90^\circ$  and  $0^\circ$  (Fig. 5E). Finally, through a magnetic field which has a component  $H_x$  pointing only in the x-direction, the magnetization direction is rotated further in

accordance with Figs. 5F and 5G until it is finally rotated in the x-direction ( $0^\circ$ ). Fig. 5H shows the de-energized end state, which specifies the information content in accordance with a logic "0" of the MRAM memory cell MTJ.--.